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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,751	02/21/2006	Franz-Josef Koerber	1034193000040	6674
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EXAMINER				
LUO, DAVID S				
ART UNIT		PAPER NUMBER		
2837				
NOTIFICATION DATE		DELIVERY MODE		
10/16/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

### Office Action Summary

**Application No.**

10/568,751

**Applicant(s)**

KOERBER, FRANZ-JOSEF

**Examiner**

DAVID S. LUO

**Art Unit**

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08/04/2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/04/2009 has been entered.
2. Applicant's arguments filed on 08/04/2009 with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,506,990 to Marin-Pache, and further in view of USPN 6,693,247 to Byers.

As to claim 1, Marin-Pache teaches an apparatus for actuating an electrical switching device high-voltage power breaker having at least one moving contact piece (Marin-Pache col. 2: lines 4-10), the at least one moving contact piece being driven via a rotating shaft that rotates about a first axis wherein an electric motor having a rotating drive shaft that rotates about a

second axis (Marin-Pache col. 2: lines 11-19), which can be coupled to the rotating shaft for the switching device by means of a gear mechanism, is provided for the purpose of driving the rotating shaft to switch the switching device high-voltage power breaker on and off (Marin-Pache col. 2: lines 20-45 where a method is taught to connect the rotating shaft of the switching device to switch the different breaking modules through the transmission levers, which are equivalent to a gear mechanism). Marin-Pache does not teach the use of a motor and a gear mechanism to drive the transmission device to switch the breaker on and off. Byers teaches the use of a motor and a gear mechanism to drive the transmission device to switch the breaker on and off (Byers fig. 1G: "102 – motor" and col. 2: lines 3-15).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement the teachings of Byers into Marin-Pache since Marin-Pache suggests a high voltage multipole electrical switching device and Byers suggests the beneficial use of electrical motor and a gear mechanism in the analogous art of electrical power switching technology.

The motivation to implement the Byers into Marin-Pache comes from the fact Byers discloses the advantage of using motor motion control (indexing motion) and a gear mechanism for indexing motion of the movable contacts with simplicity and precision and have a longer arcing life of the contacts and a significant cost savings (Byers col. 4: lines 31-56).

As to claim 2, Marin-Pache in view of Byers teaches an apparatus as claimed in claim 1, an electric motor is provided for the purpose of driving all of the switch poles (Byers fig. 1G: "102 – motor" and col. 2: lines 3-15).

As to claim 3, Marin-Pache in view of Byers teaches an apparatus as claimed in claim 1, in the case of multi-pole switching devices, it is obvious for a person with ordinary skill in the art to use a separate electric motor for the purpose of driving each switch pole.

As to claim 4, Marin-Pache in view of Byers teaches an apparatus as claimed in claim 1, wherein the first axis of the drive shaft runs parallel to the second axis of the rotating shaft (Marin-Pache col. 2: lines 15-19).

As to claim 5, Marin-Pache in view of Byers teaches an apparatus as claimed in claim 1. It is well known in the art to use servomotor for positioning/indexing controls.

As to claim 6, Marin-Pache in view of Byers teaches an apparatus as claimed in claim 1, wherein the gear mechanism is a lever mechanism (Marin-Pache col. 2: lines 20-45 where a method is taught to connect the rotating shaft of the switching device to switch the different breaking modules through the transmission levers, which are equivalent to a gear mechanism).

As to claim 13, it is rejected as the same reason as claim 5.

As to claim 14, it is rejected as the same reason as claim 6.

As to claims 7-8 and 15-16, Marin-Pache teaches a multi-pole/multi-axis switchgear transmission mechanism (Marin-Pache col. 2: lines 4-19) and rotating the shaft at a specific degree (Marin-Pache col. 3: lines 28-36, col. 6: lines 1-20).

As to claims 9-12 and 17-22, Byers teaches a toothed gear drive system which can change the transmission ratio (Byers col. 2: lines 17-30) in the electrical switching device. It is obvious for a person with ordinary skill in the art to also use toothed belt drive which can change

the transmission ratio as the toothed belt drive is equivalent to the toothed gear drive in functions.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

USPN 4,595,806 to Itoh discloses an on-load tap changer.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Luo whose telephone number is (571)270-5251. The examiner can normally be reached on M-F 9AM-6PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Benson can be reached on (571)272-2227. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/D.L./

David Luo

Art Unit 2837

/BENTSU RO/

Primary Examiner, Art Unit 2837